Design of a Medical- Wellness Product: Stationery Exercising Scooter

Background

Our client, a physiotherapist turned entrepreneur & after seeing some kids riding a scooter came up with an idea of converting this scooter action in to a stationary exercising unit so that it will benefit the people suffering from body joint pains, rehabitalization after surgery etc. SES is targeted towards the patients suffering from post-surgery ankle, knee, and hip patients, various ankle and knee conditions that do not need a surgery, back pain patients, arthritis, etc

The client approached Onio for working on his idea and convert it in to a functional product.

Scope & Challenge:

- The user of all age group should be able to use it
- Speed regulation, inclination adjustment should be possible
- Mechanism should be patentable
- Complication in operation may deter the users
- Foot print should be kept as small as possible

Research, design and prototyping of the SES scooter by Onio

Onio Solution

A detailed observation on different users using the using the treadmill and the scooter was conducted to identify critical areas of innovation. The final design included following features;

- A design of the new mechanism to keep front wheel free to enhance true scooter riding experience
- Ease of use for young as well as elderly people
- Lever mechanism to change the side of the scooter for riding with both the legs
- Adjustable speed and inclination
- Speed meter, calorimeter, pulse meter

A full-scaled working prototype was made which is then tested for its performance before it was delivered to the client.